

## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank at least having no notch portion and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and

provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature around or lower than the glass transition temperature.

2. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having flat front and reverse surfaces and a surface formed of the surrounding edge portion and the surrounding

edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and

provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature around or lower than the glass transition temperature.

3. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having a thickness whose minimum value is greater than the maximum value of thickness of a glass substrate to be obtained from said substrate blank and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and

provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature around or lower than the glass transition temperature.

4. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold

member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having a large-thickness portion and a small-thickness portion whose thickness is the smallest, the small-thickness portion having a larger area than the large-thickness portion and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and

provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature around or lower than the glass transition temperature.

5. (Previously Presented) The method of claim 3, wherein the substrate blank is formed to have one of a structure in which the substrate blank has a small-thickness portion in a central portion and a large-thickness portion in a circumferential portion, a structure in which the substrate has a large-thickness portion in a central portion and a small-thickness portion in a circumferential portion, and a structure in which the blank has a large-thickness portion in each of a central portion and a circumferential portion and a small-thickness portion between the circumferential portion and the central portion.

6. (Previously Presented) The method of claim 1, wherein a molten glass as the glass in a softened state is supplied onto the lower mold member and press-molded.

7. (Previously Presented) The method of claim 1, wherein the mold having upper and lower mold members is adjusted to have a lower temperature than the glass in a softened state to press-mold the glass.

8. (Previously Presented) The method of claim 1, wherein the substrate blank has the form of a disk.

9. (Previously Presented) The method of claim 1, wherein the substrate blank has a thickness whose minimum value and maximum value are both in the range of from 0.8mm to 2.2mm.

10. (Previously Presented) The method of claim 1, wherein the substrate blank is for use as an intermediate for a substrate for an information recording medium.

11. (Previously Presented) A method for producing a substrate, which comprises cutting and polishing the substrate blank produced by the method recited in claim 1.

12. (Original) The method of claim 11, which further comprises the step of heat treatment for crystallizing the glass.

13. (Original) A method for producing an information recording medium, which comprises preparing a substrate blank for an information recording medium according to the method recited in claim 10, cutting and polishing said substrate blank to produce a substrate for an information recording medium, and forming an information recording layer on the substrate.

14. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article blank having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank at least having no notch portion and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature around or lower than the glass transition temperature.

15. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having flat front and reverse surfaces and a surface formed of the surrounding edge portion and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature around or lower than the glass transition temperature.

16. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having a thickness whose minimum value is greater than the maximum value of thickness of a glass substrate to be obtained from said substrate blank and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature around or lower than the glass transition temperature.

17. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having a large-thickness portion and a small-thickness portion whose thickness is the smallest, the small-thickness portion having a larger area than the large-thickness portion and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature around or lower than the glass transition temperature.

18. (Previously Presented) The method of claim 16, wherein the substrate blank is formed to have one of a structure in which the substrate blank has a small-thickness portion in a central portion and a large-thickness portion in a circumferential portion, a structure in which the substrate has a large-thickness portion in a central portion and a small-thickness portion in a circumferential portion, and a structure in which the blank has a large-thickness portion in each of a central portion and a circumferential portion and a small-thickness portion between the circumferential portion and the central portion.

19. (Previously Presented) The method of claim 14, wherein a molten glass as the glass in a softened state is supplied onto the lower mold member and press-molded.

20. (Previously Presented) The method of claim 14, wherein the mold having upper and lower mold members is adjusted to have a lower temperature than the glass in a softened state to press-mold the glass.

21. (Previously Presented) The method of claim 14, wherein the substrate blank has the form of a disk.



22. (Previously Presented) The method of claim 14, wherein the substrate blank has a thickness whose minimum value and maximum value are both in the range of from 0.8mm to 2.2mm.

23. (Previously Presented) The method of claim 14, wherein the substrate blank is for use as an intermediate for a substrate for an information recording medium.

24. (Previously Presented) A method for producing a substrate, which comprises cutting and polishing the substrate blank produced by the method recited in claim 14.

25. (Previously Presented) The method of claim 24, which further comprises the step of heat treatment for crystallizing the glass.

26. (Previously Presented) A method for producing an information recording medium, which comprises preparing a substrate blank for an information recording medium according to the method recited in claim 23, cutting and polishing said substrate blank to produce a substrate for an information recording medium, and forming an information recording layer on the substrate.